A Monthly Report from The Conference Board

INTERNATIONAL ECONOMIC SCOREBOARD

The Conference Board

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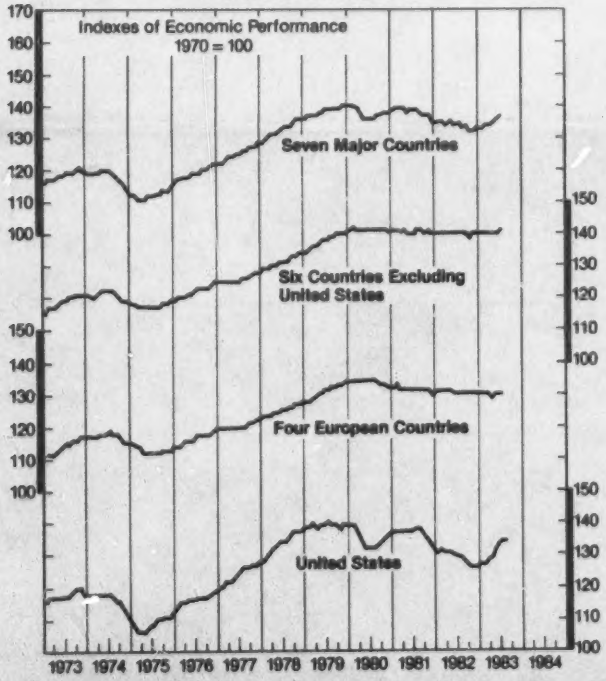
SUMMARY

The economic indicators that give advance notice of where the world's industrial nations are going are climbing rapidly in some countries, slowly in others, but climbing. The composite leading index for the seven major countries as a group showed a higher growth rate in July, 13%, than at any time since 1976. Excluding the United States, the composite growth rate was 9%. The indexes of economic performance, which include broad measures of output, employment and income, are typically more sluggish, and are proving to be so now. Here the growth rate for the seven country composite was 5% as of July, and excluding the United States, only 1%.

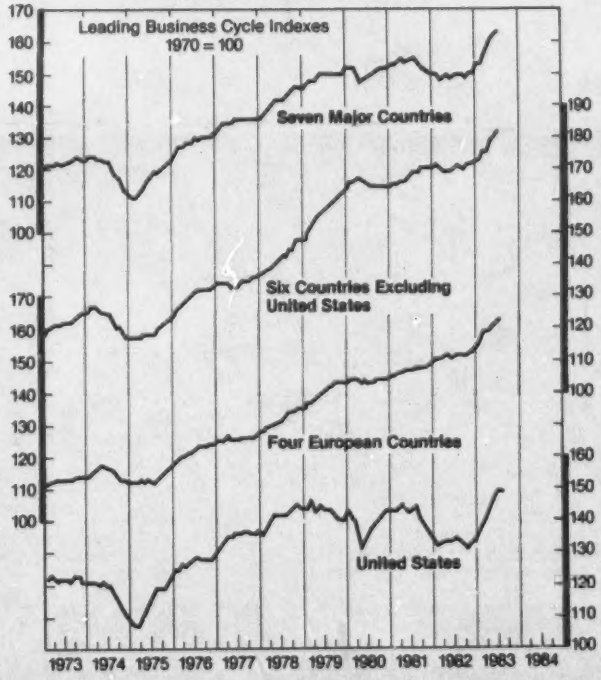
		*Indexes of Economic Performance Growth Rates**			*Leading Business Cycle Indexes Growth Rates**				
	Ten-year Growth Rate 1966-76	*6 mos. ago*	*3 mos. ago*	*Latest month*	*6 mos. ago*	*3 mos. ago*	*Latest month*	*Current Reading on the Cycle*	*Latest Month Covered*
		annual rates, percent							
United States	3	-2	5	8	6	16	14	Strong expansion continuing	Aug.
Canada	5	-2	1	6	11	15	13	Strong expansion continuing	July
Japan	8	1	1	3	-4	0	9	Recovery underway	July
United Kingdom	2	0	1	0	4	2	2	Leaders advancing slowly; economy sluggish	July
West Germany	4	-1	-2	-1	5	7	7	Leaders advancing sharply; economy sluggish	July
France	5	2	0	0	6	11	11	Leaders strong; economy sluggish	July
Italy	4	-6	-5	-5	2	6	9	Leaders strong; economy weak	Apr./May
7 countries	4	-1	1	5	4	9	13	Recovery continuing	July
6 countries excl. U.S.	5	-1	0	1	3	6	9	Recovery getting underway	July
4 European countries	4	-1	-1	0	5	7	8	Contraction stopped; leaders advancing	July

* Annual rate based on ratio of current month's index to average index over the preceding 12 months.

Where We Are



Where We're Headed



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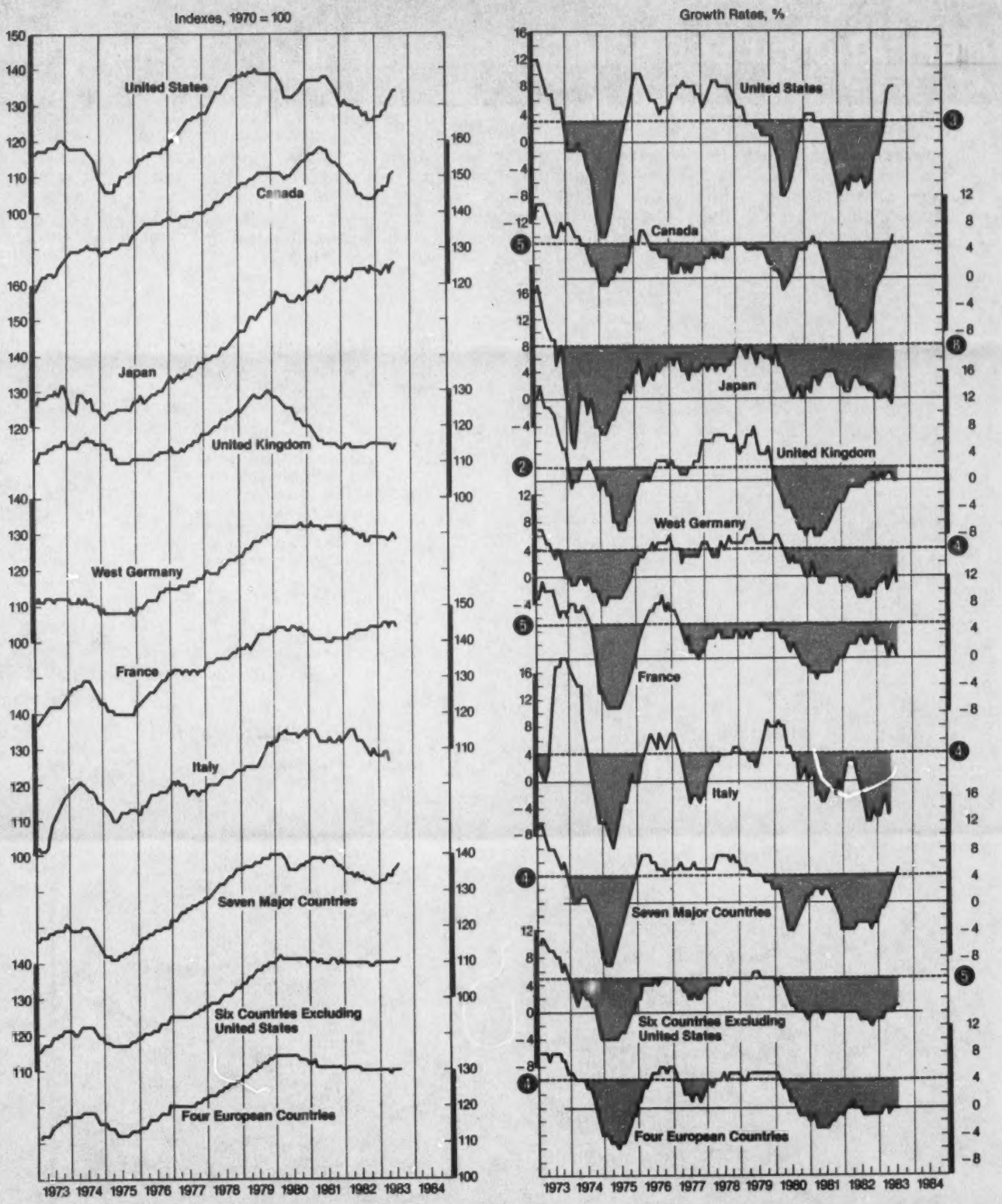
Where We Are

Indexes of Economic Performance

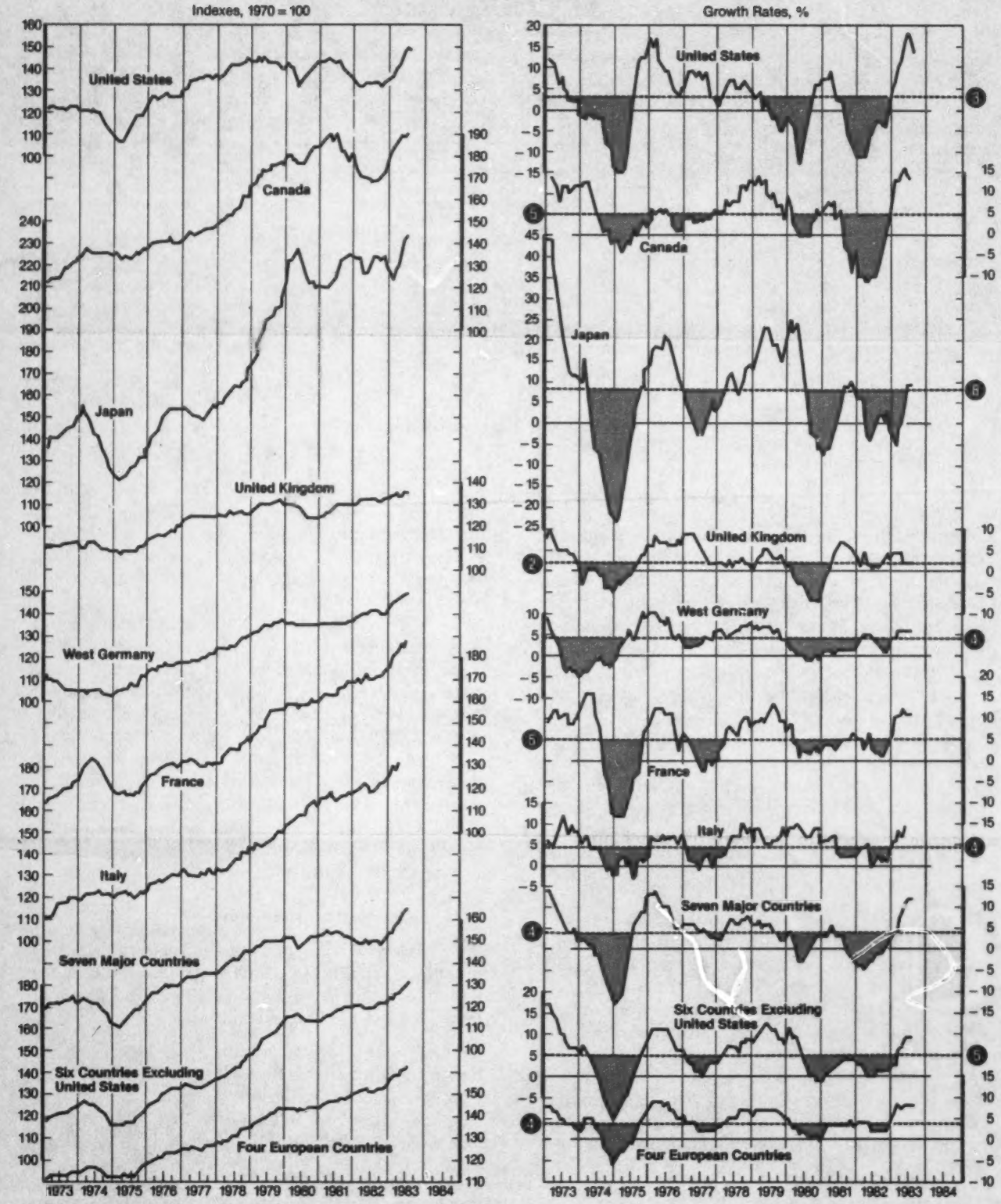


Note: Horizontal dashed lines are average growth rates for 1966–76 in the index and in real GNP

Source: The Conference Board

Where We're Headed

Leading Business Cycle Indexes



Note: Horizontal dash lines are average growth rates for 1966–76 in the index and in real GNP

Source: The Conference Board

JAPAN'S GROWTH RATE NOT AS HIGH AS IT SEEMS

Geoffrey H. Moore*

By a new method of calculating the real value of Japan's export surplus, Japan's economy has grown in recent years by only two-thirds as much as the usual estimates show. Japan estimates its gross national product the same way that the U.S. and most other countries do, but this method does not take account of the fact that for countries dependent on imported oil, a given amount of output doesn't buy as much oil as it used to. The real level of production in oil-importing countries is therefore overstated. And the overstatement is greater for countries that are more heavily dependent on imported oil.

For Japan this makes a bigger difference than for the United States, because Japan imports all its oil, whereas we produce much of our own. According to official figures, the annual growth rate of the Japanese economy (real GNP, i.e., after allowing for inflation) was 4.2 percent during the past four years. After allowing for the overstatement noted above the growth rate of "available GNP" was only 2.8 percent.

Export Surplus Dropped a Third, but . . .

This one-third reduction in Japan's growth rate is produced by what is after all only a tiny component of GNP—the net surplus (or deficit) of exports over imports. Japan's net export surplus in 1978 was 3.6 trillion yen, compared with a total GNP of 202.7 trillion yen. These figures are at current prices. In 1982 the net export surplus, again at current prices, was even smaller, 2.1 trillion yen. In the meantime GNP had grown to 263.9 trillion yen, partly as a result of real growth, partly because of inflation. The net export surplus dropped from less than two percent of the total value of output to less than one percent.

But the drop in the relative size of Japan's surplus was due in large part to the sharp rise in the price of imported oil in 1979, which increased the value of imports relative to exports. In calculating real GNP, the customary way to allow for this kind of inflation is to calculate what the value of the same quantity of imports would have been if prices had remained as they were in some base year, say 1975. The same is done for exports at their prices in the base year, and then the calculated import values are subtracted from the export values. Since the prices are for a certain year, the method does not allow for any changes in the relative prices of imports compared to exports. If, then, the quantity of exports increases rapidly while imported quantites remain relatively stable, the calculated net export surplus at constant prices will grow rapidly even though the surplus in current prices remains the same or declines. To put differently (and less technically) if the country expands the quantity of its exports rapidly to help pay for an increasingly expensive quantity of imports, the calculated value of the export surplus in constant prices will grow even if its value in current prices declines.

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As Measured, the Real Surplus Rose Fourfold, but . .

This is what has happened in Japan. As noted, the export surplus in current prices fell from 3.6 to 2.1 trillion yen, between 1978 and 1982. When calculated by the method described, the export surplus in 1975 prices

JAPAN'S GNP AND EXPORT SURPLUS, 1978-1982

	1978	*1982*	*Annual Growth Rate (%)*
GNP in current prices (bil. yen)			
1. Gross national product	202,708	263,939	6.8
2. Exports	24,105	44,479	16.5
3. Imports	20,480	42,361	19.9
4. Net export surplus	3,625	2,118	-12.6
5. GNP less export surplus	199,083	261,821	7.1
GNP in 1975 prices (bil.yen)			
6. Gross national product	172,133	202,896	4.2
7. Exports	26,649	40,329	10.9
8. Imports	23,878	28,625	4.6
9. Net export surplus	2,772	11,704	43.3
10. GNP less export surplus	169,361	191,192	3.1
Available GNP, value in 1975 prices (bil. yen)			
11. GNP less export surplus 10 = 5 + 14)	169,361	191,192	3.1
12. Net export surplus (4 + 14)	3,084	1,547	-15.8
13. Available GNP (15 + 16 = 1 + 14)	172,445	192,739	2.8

Source: Economic Planning Agency, Tokyo, (Lines 1-10). Center for International Business Cycle Research, Columbia Business School, New York, (Lines 11-13).

rose from 2.8 to 11.7 trillion yen, a four-fold increase. The physical quantity of exports rose much faster than the physical quantity of imports, but since the prices of imports (especially oil) rose much faster than the prices of exports, the export surplus in current prices actually fell.

Arithmetically, there's nothing wrong with this calculation. Economically, it doesn't make much sense. If it is necessary to produce four times as much export goods in order to buy the same quantity of imports, the nation clearly is not four times as well off. The traditional purchasing power represented by the exported output is being given to the countries that supply the imports. It is part of the cost of production, not available to the producing country.

By New Method, Real Export Surplus Fell 50%

How then should the constant price value of the net export surplus (or deficit) be computed? A reasonable method is to ask what the surplus is worth in terms of the general level of prices for goods and services purchased. If that price level has risen 20%, a given export surplus is worth 20% less than before. A comprehensive measure of this price level can be obtained by taking everything included in GNP except the net exports, and dividing the value of this aggregate in current prices by its value in constant prices. This is the implicit price deflator for gross domestic purchases. It represents 98% or more of the total GNP and hence is broadly representative of purchases by the country's inhabitants of all goods domestically produced or imported. In Japan, this measure of prices rose 16 percent between 1978 and 1982. Hence the net export surplus, expressed in 1975 prices, fell from 3.1 trillion yen to 1.5 trillion yen. Instead of rising four-fold, real net exports fell by fifty percent. It is this that explains why the growth rate of *available* real GNP is a third smaller than the official figures show. A small tail can wag a big dog if it wags hard enough.

Effect on U.S. Mixed

The same method of measuring the net export surplus in real terms can be applied to the United States, or any other country. In the U.S. as in Japan, the oil price increases in 1974 and 1979 caused import prices to rise much faster than export prices. This tended to reduce the export surplus in current prices. Since 1980, however, U.S. import prices have gone up less rapidly than export prices, and in 1982 they declined.

The result of these conflicting movements was first to make the standard method of computing real GNP overstate the growth in available output in the U.S., and then to understate it. Between 1978 and 1980, the official figures show an annual U.S. growth rate of 1.2% in real GNP, whereas by our alternative method of measuring the real net export surplus, the GNP growth rate was only 0.8%. In the next two years, on the other hand, the official rate came to 0.4% while our method made it 0.9%. For the four years as a whole, the two methods give almost the same growth rate, 0.8% and 0.9%.

Thus by our alternative calculation, the growth rate of the Japanese economy from 1978 to 1982, 2.8%, was still three times as fast as U.S. growth, 0.9%, but not five times as fast, which is what the official figures show (4.2% vs. 0.8%). The lesson behind all this is that comparisons of growth rates between countries, or within a country at different times can be materially affected by the method used to remove the effect of inflation on the net export surplus. By the same token, measures of the overall rate of inflation, and of productivity are also affected.

INDEXES, SEVEN COUNTRIES, 1982-83

		U.S.		Canada		Japan		U.K.		West Germany		France		Italy		7 Countries		6 Countries ex U.S.		4 Countries Europe	
		Indexes, 1970 = 100																			
		Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.
Oct.	82	126	131	144	171	163	223	115	132	128	140	144	172	128	172	132	149	139	171	130	152
Nov.	82	126	132	144	172	165	224	115	133	129	140	144	173	130	172	132	150	140	172	130	153
Dec.	82	126	134	144	176	164	219	115	133	129	142	144	174	129	174	132	151	140	172	130	154
Jan.	83	127	136	146	181	164	216	115	134	129	144	144	176	128	176	133	153	140	173	130	156
Feb.	83	127	137	146	182	163	214	115	134	129	145	145	180	129	177	133	153	140	173	130	157
Mar.	83	128	140	147	184	164	218	115	135	129	146	145	182	129	180	134	156	140	176	130	159
Apr.	83	129	142	147	187	165	220	115	134	128	147	144	183	127	179	134	158	140	176	129	159
May	83	131	146	148	189	164	225	115	134	129	148	145	186		182	135	161	140	179	130	160
June	83	133	148	150	189	165	231	114	135	130	148	145	185			136	163	140	180	130	161
July	83	134	149	151	190	166	232	115	135	128	149	144	187			137	164	141	182	130	162
Aug.	83	134	148																		
		Growth Rates, Percent																			
Oct.	82	-7	-4	-8	-1	1	1	0	2	-3	1	3	2	-6	3	-4	-1	-2	2	-1	2
Nov.	82	-6	-2	-7	1	2	3	0	4	-2	1	3	3	-4	2	-3	0	-1	2	-1	2
Dec.	82	-5	2	-5	5	1	-2	1	3	-2	3	2	4	-5	4	-3	2	-1	2	-1	4
Jan.	83	-2	5	-2	11	1	-4	0	4	-1	5	2	6	-5	6	-1	4	-1	3	-1	5
Feb.	83	-2	6	-1	13	0	-5	1	4	-1	5	2	10	-3	6	-1	4	0	3	0	6
Mar.	83	0	10	0	13	0	-1	0	4	0	7	2	10	-2	8	0	7	0	5	0	8
Apr.	83	2	12	1	15	1	0	1	2	-2	7	0	11	-5	7	1	8	0	6	-1	7
May	83	5	16	3	16	0	5	1	2	0	7	2	12		9	3	12	0	8	0	8
June	83	7	18	5	14	1	9	0	2	1	7	1	11			4	13	1	9	0	8
July	83	8	17	6	13	3	9	0	2	-1	7	0	11			5	13	1	9	0	8
Aug.	83	8	14																		
		Ten-Year Annual Growth Rate, Percent																			
1966-76		3	3	5	5	8	8	2	2	4	4	5	5	4	4	4	4	5	5	4	4

THE INTERNATIONAL ECONOMIC INDICATOR SYSTEM

Beginning in mid-1983, each issue of the *Scoreboard* includes indexes of economic performance for the major industrial nations, in addition to the leading indexes that have always been the main statistical building blocks of the analysis. These economic performance indexes are composites of such series as real GNP, industrial production, employment and sales—what analysts call "coincident" series, because they *define* the business cycle.

The leading indexes are composites of such series as new orders, construction contracts, corporate profits and stock prices—indicators that usually anticipate changes in production and employment by several months. Thus the indexes of economic performance tell us the current status of the business cycle, i.e., where we are, while the leading indexes tell us where the economy is headed.

Experience has shown that when the leading index begins to rise faster, it is a fairly safe rule that the economy will soon begin to rise faster too—typically after three or four months. When the leading index begins to rise more slowly or to decline, the economy is likely to follow suit shortly thereafter. (For details, see "What the Leading Indicators Indicate," *Across The Board,* April 1980 and *Business Cycles, Inflation and Forecasting,* Balinger Publishing Co., 1983.) Considerable variation in the length of lead is to be expected, however, so that constant monitoring is needed for effective use of the system. Among the uses of these data are tracking recessions and recoveries, anticipating changes in foreign trade flows, and providing early warning of new inflationary trends.

These indexes for the seven major industrial nations were developed by Geoffrey H. Moore and Philip A. Klein, and are maintained by the Center for International Business Cycle Research at the Columbia Business School. (The U.S. leading index used here differs slightly from the index reported monthly by the U.S. Dept. of Commerce.) To facilitate analysis the indexes are adjusted so their long-run growth rates are equal to those in real GNP in the country concerned during 1966-1976. These growth rates are shown at the bottom of the table on the back page and by horizontal lines on the right panel of the charts on pages 2 and 3.

For More Information and Instruction

To find out more about this indicator system, the availability of detailed data for each country, and a training program in the methodology and application of the systems, please address inquiries to

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